

to cease near the borders of the transition. Mr. Schwarz stated that many similar instances might be mentioned, and in the fact of our greater summer heat in this country, as compared to Europe, we have one of the reasons for the greater damage accomplished by introduced insects, since here they have more generations annually. *Scolytus rugulosus*, for example, is double-brooded in Europe, while here it may have six generations annually. Dr. Gill, referring specifically to Mr. Marlatt's paper, asked whether it did not indicate that early apple culture should be abandoned in the transition zone. Mr. Marlatt stated that it indicated, rather, a necessity for spraying summer apples only. Mr. Howard spoke of the possible spread of the gypsy-moth, and Mr. Schwarz called attention to the fact that insects introduced in the vicinity of Boston rarely spread.

—Mr. Ashmead read the following paper :

ON THE GENUS PELEGINELLA WESTWOOD, AND ITS POSITION AMONG THE CHALCIDIDÆ.

By WILLIAM H. ASHMEAD.

Nearly twenty-seven years ago the genus *Pelecinella* was erected by the late Prof. John O. Westwood for the reception of a peculiar Chalcidid collected by Bates along the banks of the Amazon in Brazil, the description being published in the Proceedings of the Entomological Society of London for the year 1868.

In his classical work "Thesaurus entomologicus oxoniensis," published in 1874, Westwood redescribes the genus, and on plate xxvi, fig. 8, gives an admirable illustration of the type *Pelecinella phantasma*.

Up to the present time this single species is the only one known and it is probably extremely rare, as, during this long interval of twenty-seven years, no other authority, that I am aware of, makes mention of its capture. The types in the Hope Museum at Cambridge must therefore be the only ones in existence.

It affords me, therefore, the greatest pleasure to exhibit to you tonight two new species belonging to this rare genus, discovered in the Herbert Smith collection now in my hands for naming, and to dedicate one of these to the grand old English entomologist, John O. Westwood, the other to our fellow-member, Mr. L. O. Howard.

Before describing these two species—which may be known as *Pelecinella westwoodi* and *Pelecinella howardi*—a few remarks in regard to the peculiar characteristics of the genus and its proper position among the family Chalcididæ will be apropos.

Westwood, in his characterization of the genus, stated its affinities were with *Callimome*, an old name for the modern genus *Syntomaspis*, belonging to the subfamily *Toryminæ*; but in his Thesaurus he has placed it with his subfamily *Perilampides*. Prof. Westwood was probably influenced into assigning it an affinity with the *Toryminæ* from a fancied resemblance due to the very short subsessile stigmal vein, and by the long ovipositor, characteristics more particularly found associated with members belonging to this group; but why he finally placed it with the *Perilampides* I cannot imagine, unless it is on account of the shape of the head, the head having a deep antennal emargination, and the coarse sculpture of the head and thorax.

A careful study of the two species exhibited tonight convinces me, however, that the genus has not the slightest affinity with either the *Toryminæ* or the *Perilampinæ*, but, on the contrary, all its affinities are with the subfamilies *Cleonyminæ* and the *Eupelminæ*, and I believe it forms a connecting link between these two subfamilies, but with characteristics sufficiently well marked to warrant us in elevating the genus into a distinct subfamily, intermediate between the two aforementioned groups.

It differs from all genera in the *Cleonyminæ* by the very slender legs, which increase successively rapidly in length and size; so that the hind pair are more than twice longer than the anterior pair; by the anterior and posterior coxæ being very long; by the very short subsessile stigmal vein; and by the long petiolated, strongly compressed sword-shaped abdomen.

It differs from all genera in the *Eupelminæ* by venation; by the shape and structure of the abdomen and thorax, the mesopleura having a long femoral furrow; by the proportionate length of the legs, and in having the middle tibial spur small and their tarsi not dilated; and by the two broad claspers at the base of the ovipositor.

In the *Eupelminæ* two genera, *Polymoria* Förster and *Metapelma* Westw., have the tarsi of the middle legs slender, not dilated, but the tibial spurs are large, and, besides, both have the large, non-impressed mesopleura and the characteristic mesonotum of the *Eupelminæ*, and their position cannot be mistaken.

The groups showing the closest affinities with the *Cleonyminæ* may therefore be arranged in the following order:

Subfamily Chalcedectinæ = Polychrominæ.

Subfamily Cleonyminæ.

Subfamily Pelecinellinæ.

Subfamily Colotrechninæ.

Subfamily Eupelminæ.

Subfamily Encyrtinæ.

PELECINELLA WESTWOOD.

1868. Trans. Ent. Soc. Lond., Proc., p. 36.

1874. Thes. Ent. Oxon., p. 142.

(Type *P. phantasma* Westw. ♀.)

♀.—Body very long, linear; head subglobose, with deep antennal furrow; eyes very large, convex; antennæ 11-jointed, longer than the thorax, joints 2 and 3 minute, fourth joint very long, the following joints gradually shortening; mandibles broad; maxillary palpi 4 or 5-jointed (the last two joints connate); labial palpi 3-jointed, the last joint long, clavate.

Thorax elongate, the anterior half transversely striated; pronotum very long, longer than the mesonotum but narrower, and narrowed anteriorly; mesonotum with complete parapsidal furrows; scutellum large, obconical, the axillæ approximate; metanotum long, longer than wide, without carinæ or spiracular sulci, the spiracles oval; wings with the stigmal vein not developed, sessile or punctiform, the postmarginal very long, extending to the apex of wing and fully twice as long as the marginal; legs increasing in length and size posteriorly, the hind pair more than twice larger than the anterior pair; anterior and posterior coxæ long, conical, the latter much the larger; anterior tibiæ above and hind coxæ above serrated; tibial spurs 1, 2, 2; tarsi on front and middle legs much longer than their tibiæ, those of the hind legs much shorter than their tibiæ.

Abdomen petiolated, very long, slender, compressed, sword-shaped, terminating in a long prominent ovipositor, which is more or less protected at base by two large foliaceous plates or lobes.

♂.—Unknown.

The following table will aid in separating the species :

TABLE OF SPECIES.

*Females.*

Mostly rufous..... 2.  
Mostly black.

Abdomen purplish or chalybeous; legs black, the 4 apical joints of hind tarsi white; ovip. 10 mm.....*P. phantasma* Westw.

Abdomen toward base and above the venter rufous or rufo-piceous, otherwise, including the petiole, black; legs black, but with the tibiæ and tarsi of anterior and middle legs and hind legs, except tibiæ and

- tarsi, rufous; hind tibiæ black, with an annulus at base and their tarsi white; ovip. 15-16 mm.....*P. howardi* sp. n.
2. Head above, the antennæ, the thorax above (rarely entirely) and ovipositor, except tips, black.  
Abdomen except tip of claspers, and legs except hind tarsi, rufous; ovip. 7-8 mm.....*P. westwoodi* sp. n.

(1) *Pelecinella phantasma* Westw.

Trans. Ent. Soc. Lond., 1868, Proc., p. 36, ♀.

Thes. Ent. Oxon., 1874, p. 142, pl. xxvi, fig. 8.

Hab.—Amazon river, Brazil, (Bates).

Types in Hope Museum at Oxford.

(2) *Pelecinella howardi* sp. n.

♀.—Length to tip of claspers 24 mm.; to tip of ovipositor 38 mm. Black; anterior tibiæ and tarsi, hind coxæ and femora, rufous; hind tibiæ, except a white annulus at base, black or fuscous; hind tarsi, except basal one-third of basal joint, white. Wings subhyaline; tegulæ rufous; submarginal, marginal, the sessile stigmal, and the postmarginal veins black; spurious veins fuscous. Abdomen much longer than the head and thorax united, mostly black, the second and third segments rufous, the latter more or less stained with black and becoming black towards apex; ovipositor as long as abdomen, its tip white.

Hab.—Chapada.

Described from 2 ♀ specimens in Herbert Smith collection. It is at once distinguished from *P. phantasma* Westw. by the color of legs and abdomen and by the much longer ovipositor.

I have dedicated this grand Chalcidid to my friend Mr. L. O. Howard.

(3) *Pelecinella westwoodi* sp. n.

♀.—Length to tip of claspers 16-17 mm.; to tip of ovipositor 19 to 22 mm. Mostly rufous, the thorax more or less marked with black or sometimes entirely black except a rufous spot at sides; antennæ, the bottom of antennal furrow, vertex, occiput, veins in wings, tips of the broad claspers at tip of abdomen, and the ovipositor, except extreme tip (which is white), black; hind tarsi white, the basal one-fourth of the first joint, including the extreme tip of the tibiæ and the tibial spurs, black.

Hab.—Chapada and Port Branca.

Described from 2 ♀ specimens in Herbert Smith collection.

This species is quite distinct in the color of the legs and abdomen and in size from the other forms mentioned here. The anterior and middle legs, especially their tibiæ and tarsi, are paler than the posterior pair, and rather more of a brownish-yellow than rufous.

It is dedicated to the late Prof. John O. Westwood.